

Armadillo Soft-Armour ECS

Case Study

Location: Northallerton, North Yorkshire

Area size: 3,000m²

Product: Armadillo Soft-Armour Erosion Control System

Client: Swinburne Horticulture

Project Background

The redevelopment of a former Manor house near Northallerton involved the removal and profiling of several thousand tonnes of earth resulting in the formation of various new slopes adjacent to the new home.

Challenges

Due to the embankment's 1:3 angle and other factors, the risk of erosion was high, plus with the proximity of the newly formed earth bank to the Manor house meant that any erosion control method used had to be effective.

Solution

We were approached by the architects and asked to propose an alternative to traditional hard-engineering techniques as these were not practical on this occasion due to type of project but required something stronger than other soft-engineering methods.

The obvious choice was Armadillo Soft-Armour, offering permanent slope protection and incorporating a high performance hydromulch with no cure time, essential due to the area's high level of rainfall and combined with an amenity grass seed mixture developed by ourselves for embankments due to the deep rooting plant species.

Working with the main contractor, the slope was graded to a smooth profile to reduce the micro-contours and prevent any voids. Immediately after the TRM was installed on top of the soil it was then hydroseeded, ensuring the three-dimensional matrix of the TRM is completely filled by directly hydroseeding into it.

With a few weeks the deep rooting grasses had germinated and were beginning to establish so that the TRM was no longer visible to the client.

About Armadillo Soft-Armour

Armadillo Soft-Armour is an erosion control system comprising of TRM (turf reinforcement matting), high performance hydromulch and specially developed deep rooting grass seed mixture. These three constituents used together create one of the most effective erosion control solutions of it's type on the market and when vegetation is fully established Armadillo Soft-Armour can withstand critical shear stresses of 800 N/m²